REMARKS

The present application relates to inbred maize line PH6WG. Claims 1-30 are pending in the present application. No new matter has been added by way of amendment. Applicants respectfully request consideration of the claims in view of the following remarks.

Request for Information under 37 C.F.R. § 1.105

The Examiner has made a Request for Information under 37 C.F.R. § 1.105. The Examiner states the requested information is "required to make a meaningful and complete search of the prior art". See Office Action, p. 4.

Applicants provide answers to each of the Examiner's interrogatories discussed infra.

The Examiner begins by asking firstly, what were the original parental maize lines used to produce maize inbred line PH6WG? Please supply information pertaining to the lineage of the original parental lines back to any publicly available varieties. PH05W and PH07D. Information pertaining to the lineage of the original parental lines is available within the PVP Application No. 200100245, attached as Appendix 1.

Secondly, what method and steps were used to produce maize inbred line PH6WG? Pedigree selection method produced by selfing for 6 generations.

Third, have any of said parental maize lines or progeny therefrom been disclosed or made publicly available?

- a. The parental maize line PH05W was previously publicly disclosed or made publicly available in PVP Certificate No. 9700212 and U.S. Patent No. 5,750,849. The parental maize line PH07D was previously publicly disclosed or made publicly available in PVP Certificate No 9700214 and U.S. Patent No. 5,763,757.
- No other progeny of the parental cross PH05W/PH07D was previously publicly disclosed or made publicly available by Applicants prior to the earliest priority date.

Fourth, were any other maize lines produced by said method using said original parental maize lines, and if so, have said produced maize lines been publicly available or sold? If so, under what designation/denomination and under what conditions were said other maize lines disclosed or made publicly available? No maize line using the same F1 cross has been produced by said method using said original parental maize lines at or before the time of filing of the

instant application. Further, no maize line using the same F1 cross has been *previously* disclosed or made publicly available prior to the earliest priority date.

In light of the above remarks, Applicants respectfully request reconsideration and compliance with the interrogatories under the Request for Information under 37 C.F.R. § 1.105.

Conclusion

In conclusion, Applicants submit in light of the above amendments and remarks, the claims as amended are in a condition for allowance, and reconsideration is respectfully requested. If it is felt that it would aid in prosecution, the Examiner is invited to contact the undersigned at the number indicated to discuss any outstanding issues.

No other fees or extensions of time are believed to be due in connection with this amendment; however, consider this a request for any extension inadvertently omitted, and charge any additional fees to Deposit Account No. 26-0084.

Reconsideration and allowance is respectfully requested.

Respectfully submitted,

Lila A. T. Akrad, Reg. No. 52,550 McKEE, VOORHEES & SEASE, P.L.C.

801 Grand Avenue, Suite 3200

Des Moines, Iowa 50309-2721 Phone No: (515) 288-3667 Fax No: (515) 288-1338

CUSTOMER NO: 27142 Attorneys of Record

- LATA/bjh -



200100245

HHE UNITED STATES OF AVIETION

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Pioneer Ki-Bred International, Inc.

THEFERS, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

· PRO AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE REPRODUCIO, OR TUBER PROPERTY, THE RABLE AND DESCRIPTION OF WHITE ARE CLORARMED IN THE ARPLICATION AND SERBIETTS, A COPY OF WHICH IS ITERATURE AND EXPECTED AND MADE A PART HERBOR, AND THE VARIOUS INQUIREMENTS OF LAW PASCICI, GESSALAGE, AND REVOIDED LIVE BEIN COMPULED WITH, AND THE TITLE TUBERTO IS FROM THE RESCRIPTS OF WHITE FIRST VARIETY PROTECTION OFFICE, IN THE APPLICATION INDUCATION IN THE SAID COPY, AND WHITE PERSON THE ADMINISTRATION FROM THE APPLICATION ADDITION OF THE SAID APPLICATION AND THE SAID APPLICATION THE SAID APPLICATION AND THE SAID APPLICATION AND THE SAID APPLICATION AND THE SAID APPLICATION AND THE SAID APPLICATION OF THE SAID APPLICATION AND THE SAID APPLICATION AND THE SAID APPLICATION OF THE SAID APPLICATION AND THE SAID APPLICATION A

DARKE IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE , OR USING IT IN BID OR DIFFERENT VARIETY THEREFROM TO THE EXTENT PROVIDED BY THE PLANT VARIETY TON ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2921 ET SEQ.)

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Plant Variety Protection Office Telephone: (301)504-5518 FAX: (301)504-5291

Homepage: http://www.ams.usda.gov/science/pvp.htm

ITEM

- Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (3) evidence of uniformity and stability; and
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Exhibit A. Origin and Breeding History

Pedigree: PH05W/PH07D)XA0222X

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Pioneer Line PH6WG, Zea mays L., a dent-like com inbred, was developed by Pioneer Hi-Red International, ine. from the single cross hybrid PH6W (Certificate No. 9700212) X PH6TD (PVP Certificate No. 9700214) using the pedigree method of plant breeding. Varieties PH60W and PH6TD are proprietary inbred lines of Pioneer Hi-Bred International, Inc. Selfing was practiced from the above hybrid for 6 generations using pedigree selection. During line development, crosses were made to inbred testers for the purpose of estimating the line's combining ability. Yield trials were grown at Johnston, Jowa as well as other Pioneer research locations. After initial testing, additional hybrid combinations have beet evaluated and subsequent generations of the line have been grown and hard-pollinated with observations again made for uniformity.

Variety PH6WG has shown uniformity and stability for all traits as described in Erthibit C - 'Objective Description of Variety'. It has been self-pollinated and ear-rowed 5 generations with careful attention paid to selection criteria and uniformity of plant type to assure genetic homozygoustly and phenotypic stability. The line has been increased both by hand and in isolated fields with continued observations for uniformity and stability, and for 3 generations during the final stateges of intreed development and second multiplication. Very high standards for genetic purity have been established morphologically using field observations and electrophore relative using sound also molecular matter methodology.

No variant traits have been observed or are expected in PH6WG.

The oriteria used in the selection of PH6VC were yield, both per se and in bybrid combinations; late season plant health, grain quality, stafk lodging resistance, and termel size, especially important in production. Other selection criteria include: ability to germiante in adverse conditions; number of sillers, especially important in production because having numerous tillura increases hybrid production costs spent on detasseling; disease and insect resistance; pollon yield and tassel size.

Exhibit A: Developmental history for PH6WG

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	200,
Season/Year Pedigree Grown	Inbreeding Level of Pedigree Grown
SUMMER, 1994: PH05W, PH07D	F0
WINTER, 1994: PH05W/PH07D	Fl
SUMMER, 1995: PH05W/PH07D)X	F2
SUMMER, 1996: PH05W/PH07D)XA0	F3
SUMMER, 1997: PH05W/PH07D)XA02	F4
WINTER, 1997: PH05W/PH07D)XA022	F5
SUMMER, 1998: PH05W/PH07D)XA0222	F6
Seed PH0SW/PH07D)XA0222X	F7

*PH6WG was selfed and ear-rowed from F3 through F6 generation.
#Uniformity and stability were established from F3 through F7 generation and beyond when seed supplies were increased.

Exhibit B. Novelty Statement

Variety PH6WG mostly resembles Pioneer Hi-Bred International, Inc. proprietary inbred line PH07D (PVP Certificates No. 9700214). Data are compiled from three environments, two in the Johnston, IA areas and one in the Ankeny, IA area. The data in Table IA and IB are from t-lests collected in 1993 are and one in the Ankeny, IA area. The data in Table IA and IB are from t-lests collected in 1993 areas and one in the Ankeny, IA area.

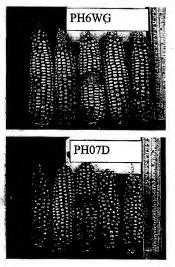
Variety PH6WG has a lower tassel axis floret density (11.8 florets/4cm vs 17.1 florets/4cm) than PH67D (Table 1A, 1B).

Variety PH6WG has fewer primary branches on the tassel (1.2 vs 4.3) than PH07D (Table 1A, 1B).

Variety PH6WG has a white cob color (1, white, 5Y91) vs a red cob color (3, red, 10R36) for PH07D (Figure 1A).

Exhibit B Novelty Statement Figures

Figure 1A. Images of cob color are supporting evidence for differences between PH6WG and PH07D.



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Exhibit B Novelty Statement Tables

Table IA. Data from 1999 and 2000 are supporting evidence for differences between PHOWE and PHO/D. A t-test was performed and broken out by year.

TRAIT	1	da.	100	- COL	3						Section Sidema-		Pooled	Pooled	Prob. (2-lail)
Roral density (# of Screte/4cm)	88	1999 PHEWG PHOTO	PH070	ā	ā	12.	#	7	2.503	2,582	0.646	0.667	88	4.	0.000
fices density (# of ferets/form)	2000	2000PH8WG PH07D	PH67D	5 >	ŧ.	11.8	47.9	en ep	2.134	2.314	0.561	0.597	28	0.0	0.000
tacce primary branch (# of primary branches)	8	1999 PH6WG PH07D	DH07D	\$	ž.	22	\$	27	1.373	1.685	0.355	0.435	82	4.8	0000
beauti (# of primary	2000	2000PHEWG PH07D	O. O.	5	\$	2	92	8.6	0.061	1.207	0.145	0.312	8	-10.5	0000

Table 18. Summary data across years are supporting evidence for differences between PH6WG and PH07D. A t-test was performed across years.

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DEFINITIONS

2001/0245

In the description and examples, a number of terms are used herein. In order to provide a clear and consistent understanding of the specification and claims, including the scope to be given such terms. the following definitions are provided:

ANT ROT	=	ANTHRACNOSE STALK ROT (Colletotrichum graminicola).
		A 1 to 9 visual rating indicating the resistance to Anthracnose Stalk Rot. A

higher score indicates a higher resistance. BAR PLT BARREN PLANTS.

The percent of plants per plot that were not barren (lack ears). BRITTLE STALKS. BRT STK

This is a measure of the stalk breakage near the time of pollination, and is an indication of whether a hybrid or inbred would snap or break near the time of flowering under severe winds. Data are presented as percentage of plants that did not snap.

BUACR YIELD (BUSHELS/ACRE). Yield of the grain at harvest in bushels per acre adjusted to 15.5% moisture.

CLD TST - COLD TEST. The percent of plants that germinate under cold test conditions.

CLN CORN LETHAL NECROSIS. Synergistic interaction of maize chlorotic mottle virus (MCMV) in combination with either maize dwarf mosaic virus (MDMV-A or MDMV-B) or wheat streak mosaic virus (WSMV). A 1 to 9 visual rating indicating the resistance to Corn

Lethal Necrosis. A higher score indicates a higher resistance. COM RST COMMON RUST (Puccinia sorghi). A 1 to 9 visual rating indicating the resistance to Common Rust. A higher score

indicates a higher resistance. DIP ERS DIPLODIA EAR MOLD SCORES (Diplodia maydis and Diplodia macrospora).

A 1 to 9 visual rating indicating the resistance to Diplodia Ear Mold. A higher score indicates a higher resistance.

- DROPPED EARS. DRP FAR A measure of the number of dropped ears per plot and represents the percentage of plants that did not drop ears prior to harvest. EAR HEIGHT. EAR HT

> The ear height is a measure from the ground to the highest placed developed ear node attachment and is measured in cm.

EAR MLD = GENERAL EAR MOLD. Visual rating (1-9 score) where a "1" is very susceptible and a "9" is very resistant. This is based on overall rating for ear mold of mature ears wit determining the specific mold organism, and may not be predictive for a specific

ear mold EAR SZ - EAR SIZE.

A 1 to 9 visual rating of car size. The higher the rating the larger the car size. ECB 1LF EUROPEAN CORN BORER FIRST GENERATION LEAF FEEDING (Ostrinia nubilalis).

A 1 to 9 visual rating indicating the resistance to preflowering leaf feeding by first generation European Com Borer. A higher score indicates a higher resistance.

EUROPEAN CORN BORER SECOND GENERATION INCHES OF ECB 2IT TUNNELING (Ostrinia nubilalis)

Average inches of tunneling per plant in the stalk. EUROPEAN CORN BORER SECOND GENERATION (Ostrinia mubilalis). ECB 2SC

A 1 to 9 visual rating indicating post flowering degree of stalk breakage and; other evidence of feeding by European Corn Borer, Second Generation: A higher score indicates a higher resistance. ECB DPE EUROPEAN CORN BORER DROPPED EARS (Ostrinia nubilalis). Dropped cars due to European Corn Borer. Percentage of plants that did not drop ears under second generation com borer infestation. EGRWTH = EARLY GROWTH. This is the visual rating (1 to 9) of the amount of vegetative growth after emergence at the seedling stage (approximately five leaves). A higher score indicates better vigor or early season growth. EST CNT EARLY STAND COUNT. This is a measure of the stand establishment in the spring and represents the number of plants that emerge on per plot basis for the inbred or hybrid. EYE SPT EYE SPOT (Kabatiella zeae or Aureobasidium zeae). A I to 9 visual rating indicating the resistance to Eye Spot. A higher score indicates a higher resistance. = FUSARIUM EAR ROT SCORE. (Fusarium moniliforme or Fusarium FUS ERS subplutinans). A 1 to 9 visual rating indicating the resistance to Fusarium ear rot. A higher score indicates a higher resistance. GDU GROWING DEGREE UNITS. Using the Barger Heat Unit Theory, which assumes that maize growth occurs in the temperature range 50°F - 86°F and that temperatures outside this range slow down growth; the maximum daily heat unit accumulation is 36 and the minimum daily heat unit accumulation is 0. The seasonal accumulation of GDU is a major factor in determining maturity zones. GDU TO SHED. GDU SHD The number of growing degree units (GDUs) or heat units required for an inbred line or hybrid to have approximately 50 percent of the plants shedding pollen and is measured from the time of planting. Growing degree units are calculated by the Barger Method, where the heat units for a 24-hour period are: GDU = (Max. Temp. + Min. temp.) - 50/2 The highest maximum temperature used is \$6° F. and the lowest minimum temperature used is 50°F. For each inbred or hybrid it takes a certain number of GDUs to reach various stages of plant development. GDU SLK -GDU TO SILK. The number of growing degree units required for an inbred line or hybrid to have approximately 50 percent of the plants with silk emergence from time of planting. Growing degree units are calculated by the Barger Method as given in GDU SHD definition. GIRERS GIBBERELLA EAR ROT (PINK MOLD) (Gibberella zeae). A 1 to 9 visual rating indicating the resistance to Gibberella Ear Rot. A higher score indicates a higher resistance. CLF SPT GRAY LEAF SPOT (Cercospora zeae-maydis). A 1 to 9 visual rating indicating the resistance to Gray Leaf Spot. A higher score

indicates a higher resistance.

indicates a higher resistance.

GOSS' WILT (Corynebacterium nebruskense).

A 1 to 9 visual rating indicating the resistance to Goss' Wilt. A higher score

GOS WLT -

2001-0245

GRN APP GRAIN APPEARANCE. This is a 1 to 9 rating for the general appearance of the sholled grain as it is harvested based on such factors as the color of harvested grain, any mold on the grain, and any cracked grain. High scores indicate good grain quality.

HELMINTHOSPORHIM CARBONUM LEAF BLIGHT (Helminthosportum) HC BLT carbonum). A 1 to 9 visual rating indicating the resistance to Helminthosporium infection. A higher score indicates a higher resistance. HEAD SMUT (Sohacelotheca reiliana). HD SMT This score indicates the percentage of plants not infected. KER KG KERNELS PER KILOGRAM. The number of kernels per 1 kilogram of seed after discard is removed. KERNEL SIZE DISCARD. KSZ DCD The percent of discard seed; calculated as the sum of discarded tip kernels and extra large kernels. MAIZE DWARF MOSAIC COMPLEX (MDMV = Maize Dwarf Mosaic MDM CPX = Virus and MCDV - Maize Chlorotic Dwarf Virus). A 1 to 9 visual rating indicating the resistance to Maize Dwarf Mosaic Complex. A higher score indicates a higher resistance. HARVEST MOISTURE. MST The moisture is the actual percentage moisture of the grain at harvest.

NORTHERN LEAF BLIGHT (Helminthosportum turcleum or Exserohitum NLFBLT A 1 to 9 visual rating indicating the resistance to Northern Leaf Blight. A higher score indicates a higher resistance. PLTHT PLANT HEIGHT. This is a measure of the height of the plant from the ground to the tip of the tassel in om. POL SC POLLEN SCORE. A I to 9 visual rating indicating the amount of pollon shed. The higher the score the more pollen shed.
POLLEN WEIGHT. POL WT This is calculated by dry weight of tassels collected as shedding commences minus dry weight from similar tassels harvested after shedding is complete. - PREDICTED RELATIVE MATURITY. PRM This trait, predicted relative maturity, is based on the harvest moisture of the grain. The relative maturity rating is based on a known set of checks and utilizes standard linear regression analyses and is also referred to as the Comparative Relative Meanity Rating System that is similar to the Minnesota Relative Maturity Rating System PRM SHD PREDICTED RELATIVE MATURITY GDU TO SHED. A relative measure of the growing degree units (GDU) required to reach 50% pollen shed. Relative values are predicted values from the linear regression of observed GDU's on relative maturity of commercial checks. RTLDG ROOT LODGING. Root lodging is the percentage of plants that do not root lodge; plants that lean from the vertical axis at an approximately 30° angle or greater would be counted as root lodged.

A 1 to 9 visual rating indicating the amount of scatter grain (lack of pollination or kernel abortion) on the car. The higher the score the less scatter grain.

SCT GRN

- SCATTER GRAIN.

SELECTION INDEX. 2001 C245 The selection index gives a single measure of the hybrid's worth based on SEL IND SELECTION INDEX. information for up to five traits. A maize breeder may utilize his or her own set of traits for the selection index. One of the traits that is almost always included is yield. When selection index data is presented, the tables represent the mean value averaged across testing stations. SLF BLT SOUTHERN LEAF BLIGHT (Helminthosporium maydis or Bipolaris maydis). A 1 to 9 visual rating indicating the resistance to Southern Leaf Blight. A higher score indicates a higher resistance. SOUTHERN RUST (Puccinia polysora). SOU RST A 1 to 9 visual rating indicating the resistance to Southern Rust. A higher score indicates a higher resistance. STAGRN - STAYGREEN. Staygreen is the measure of plant health near the time of black layer formation (physiological maturity). A high score indicates better late-season plant health. STK CNT NUMBER OF PLANTS. This is the final stand or number of plants per plot. STK LDG. - STALK LODGING. This is the percentage of plants that did not stalk lodge (stalk breakage) as measured by either natural lodging or pushing the stalks and determining the percentage of plants that break below the car.

STEW MLT = STEWART'S WILT (Evoluta insuratio). A 1 to 9 visual rating indicating the resistance to Stewart's Wilt. A higher score indicates a higher resistance. - TASSEL BRANCHES TASBRN This is the number of primary tassel branches. TAS SZ - TASSEL SEZE. A 1 to 9 visual rating was used to indicate the relative size of the tassel. The igher the rating the larger the tassel. TAS WT TASSEL WEIGHT. This is the average weight of a tassel (grams) just prior to pollen shed. TEX EAR EAR TEXTURE. A I to 9 visual rating was used to indicate the relative hardness (smoothness of crown) of mature grain. A I would be very soft (extreme dent) while a 9 would be very hard (flinty or very smooth crown). TILLER THIERS A count of the number of tillers per plot that could possibly shed pollen was taken. Data are given as a percentage of tillers: number of tillers per plot divided by number of plants per plot. TEST WEIGHT (UNADJUSTED). TST WT The measure of the weight of the grain in pounds for a given volume (bushel).

> A I to 9 visual rating was used to give a relative rating for yield based on plot car piles. The higher the rating the greater visual yield appearance.

YLD SC

- YIELD SCORE.

United States Department of Agriculture, Agricultural Marketing Service Science Division, Plant Variety Protection Office National Agricultural Library Building, Room 500

Objective Description of Variety

Houser Hi-Bred I	ioner Hi-Bred International, Inc.		Vari	ety Namo or Temporary Designation PH6WG
	r RFD No., City, State, Zip Cod	s and Country	FOR OFFICIAL USE	16001
limiton, Iowa 50			LALO MINISTE	ILOOT 0245
CHOCAS (George Green) A Green Ty Durk Green Tyres-Yeffer	in contraction with historial or 06-Pule Yellow 07-Yellow 06-Yellow Grange 09-Salmon 10-Pink-Orange	for code to describe all color choic 11=Pixk 12=Light Red 13=Cherry Red 14=Red 15=Red & White	tes: describe #25 and #26 16=Pale Pusple 17=Pusple 18=Colorios 19=White 20=White Capped	5 in Consessin section): 21 **Buff* 22=The 23=Thouse 24=Bronzo 25=Variageand (Describe)
MOARD DIRECTO	HOKES			26-Other (Describe)
To spect standar (in	background and maturity) of th	nee to reake comparisons based or		
Dest Francisco		Yellow Deat (Unrelated)		
	32, B44, B68	Co109, ND246,	C13, 1	lowa5125, P39, 2132
B37, B76, 6		Oh7, T232,		
	B73, NC268	W117, W153R,	Popcor	
	2; Vals. A682	WIRDN	\$GL5	33, 4722, HP301, HP7211
		Wkite Dent:	*****	_
3 A619, MB71, 9899, Va26 84 W64A, A554, A654, Pa91		White Dent: Pipecone: Pipecone:		

1. ITPE: 8	describe i	niermediate types in Comme	rits section):			Stand	ard Variety	Name
2	Sweet :	2=Dent 3=Flint 4=Flour 5=	Pop 6=Ornamontal			- 1	PAST	
REGIO	N WHERE	DEVELOPED IN THE U.S.	A:			Stand	ard Seed S	Source
2 1	-Northwe	st 2×Northcentral 3=Northe	est 4=Southeast 5=8	outhcentral		-		
6	Southwe	et 7=Other Contest Com E	ink			1	ALCES 193	25
		egion of Best Adaptability: si	now Heat Unit formula	in 'Comments' se	rction)			
	HEATU						HEAT UN	TS.
074	1.416.8	From emergence to 50% of	f placts in site			079	1.518.0	
	1.475.3	From emergence to 50% of				077	1,469.5	
003	0.007.8	From 10% to 90% pollen s				004	0.097.2	
		From 50% silk to optimum						
		From 50% silk to hervest a	il 25% moisture					
4 PLANT	:			Standard			Standard	
			·	Devision	Size		Deviation	Size
		Height (to tessel lip)	4.	12.58	.06		14.02	96
		feight (to base of tap ear no	de)	05.90	06	086.7		96
		th of Top Ear Intercode		02.05	26	016.4		26
		Number of Titlers		90,00	25	0.0		95
		Number of Ears per Stalk sein of Brace Roots: 1=Abe	ant PaFaint Subbotan	00.09 4a AnDark Sak	OS CV Dank	1.0		96
						 		
6. LEAF:				Standard	Sample		Standard	
				Deviation	Size		Deviation	
		of Ear Node Leaf		00.53	96		00.36	*
		n of Bar Node Leaf		92.08	96	97.6		
		of features above top ear		99.41	96	26		96
17.	at proba	Lotif Angle (measure from 2 to to stalk shows find)	nd leaf above ear	03.21	86	20	10.00	96
03	Link Cale	or (Municial acida)	7.4GY38			02	. 5G	4
1	Loui She	all Pubescence (Rate on sc	ele from 1=nonir to \$44	ke peach fuezh		1	-	4
	Meighet	Waves (Rain on seels from	1-mone to 9-many)			_		
	Conglicati	nal Crosses (Plate de scale 1	tom I-none to B-raph	ń				
O. TASSE	L:			Standard	Sample	8	Standard	
				Deviation	Size		Durletton	30%
		of Primgry Lateral Branches		01.43	96	1 11		25
		ngle from Central Spike		15.37	95	1		26
		al Longth (from los less colla		04.28	98	60.7		20
		ned (rate on scale from 0-rrs		hed)				1
		lator (Muneell code)	5Y8.55			91		
		lator (Muneell code)	SGYSA			91		4
		nes (Glume Bands): 1=Abse	nt Z=Present			1 1		
1	-	,				1 -		

pplication \	fariety Data	PH6WG	Page 2			Standard Variet	y Duta
7a. EAR (L	inhusked Data):		,				
01	Silk Color (3 days	after emergence) (Mu	nseli code)		2.5GY80	07 2.50	on the
91	Freish Husk Color	(25 days after 50% sill	(deco Beenuhil) (gebi		SGYSA	D2 5GY	sé.
21	Dry Husk Color (6	5 days after 50% alkir	g) (Munsell code)		5Y92	21 2.57	al
2	Position of Ear at	Dry Husk Stage: 1= U	plight 2= Horizontal 3	= Pendant	7	2	r
4	Husk Tightness (F	Rate of Scale from 1=4	ery loose to 9=very tip	pht)		6	
2	Husk Extension (s	st barveet): 1=Short (ex	ers exposed) 2=64edk	um (<8 cm)		2	
	3=Long (8-10 cm	beyond ear to) 4=Yen	Long (+10 cm)				
Th. EAR	Husked Ear Osta)			Standard	Sample	Standard	Sample
				Deviation	Size	Deviation	Size
16.2	on Ear Langth			00.75	96	15.2 06.98	96
1.13	mm Ear Olemeter	at mid-point		01.21	96	38.7 01.03	90
37.1	gm Ear Weight			13.86	26	85.0 10.35	96
-	Number of Kernel	Rows		00.41	06	15.8 00.75	96
		ndistinct 2=Oistinct				2	
		-Straight 2-Slightly C	urved 3=Spiral			1	
14.0	om Shank Langth			91.55	96	08.0 00.80	96
-		ht 2= Average 3=Extra	100			2	
. KERNE	(Dried)			Standard	Sarapie	Standard.	Sample
	- (0)10-1			Deviation	Size	Deviation	Size
10.7	mis Kemel Length	1		90.52	98	09.Z 90.52	96
07.8	mm Keenel Width			00.41	96	97.5 90.55	26
05.8	ner Kernet Thicky	1655		99.41	96	05.0 90.00	26
20	% Round Kernels	(Strape Grade)		94.56	96	52.0 19.95	96
1	Meurone Golor Pa	otiern: 1-Hemosygous	2=Segregating			1	
Q.	Alserone Color (F	Numbel (code)		19	YISO14	07 2.5	1362
•	Hard Endospenn	Color (Muntel code)		16	YREAZ	97 191	RZ
93	Endosperm Type:					1	
	4wHigh Amylor) RyExtra Secot (et/2) se Standt (=Mlaxy St 8=Super Secot (ee)	ech 9-High Protein				
27.3		XX Kernels (ansized se	mple)	01.97	25	24.50 90.39	œ
9. COB:				Standard Deviation	Sample	Standard	
	0-1 01	a at suid males		00.98	96	23.5 91.05	95
	mm Cob Diamete		aval	30/300	₩.		oesis
12	Cob Color (Muns	en (COOE)	SYST			1 - 1	

Application Variety D

Page 2

Standard Variety Date

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3 MS 412/03

PHOWG	Application Variety Data			
	unterested Astract. Data	rage 3	Standard Variety	
10. DISEAS	E RESISTANCE (Rate from 1 (m	out murinostible) i	in 9 (most resistant):	
leave b	ank If not tested; leave Race or S	train Options blac	nk II polygenich:	
A.Le	of Blights, Wilts, and Local Infect			
	Anthracnose Leaf Blight (C	erg murbitotello	minioota)	
	Common Rust (Puccinia ac Common Small (Ustilago n			5
	Evenot (Kabatista zane)	en) cas)	1	
	Goss's Will (Claribacter mi	rhinanasa san	Mehmekanad	
	5 Gray Leaf Soot (Ceroospor	H TOGO-GOVEN		5
	Helminthospedem Leaf Sp	ot (Moderis zeio	de) Race	¥
	5 Northern Leaf Blight (Euser	ohilem birdoum)	Race	5
	6 Southern Leaf Might (Block	aris maydle)	Race	5
	Southern Flust (Puccirile			-
	5 Stewart's Will (Erwinia ster Other (Specify)	vertil)		Z
8. 39	elemic		i	
	Com Lethal Necrosis #MCI	CVMQM Bee. VI	1	
	§ Heed Senst (Synacolothes Mains Chicolic Duari Viru Mains Chicolic Mette Viru	relien)	1	
	Maine Chlorolly Dwarf Viru	(MON)		•
	Males Chlorolle Mottle Viru	s (MCMV)	1	
	4 Malze Dwerf Mosaic Vinis	(MOMM)		3
	Scripture Destry Milder o Other (Specify)	Com Peranasa	terespora aerghi)	
C. 84	all: Flois			
	4 Anthrounces Stalk Rat (Col	lichtstein aus	delentes	5
	Diplode State Pot (Blance	smells mouth)		5
	Fusiarium Stalk Rot (Fusial	(empliforme)	. 1	
	Gibberelle Bielk Rot (Gibbe	refle 26ms)	1	
	Other (Specify)	,		
D. Ea	r and Kernel			
	Aspergitus Har and Kernel	Rot (Asperallus	Smooth	
	5 Okoloska Sar Pet Olivenium	College (Street)		
	Function Ear and Kernel F Gibberole Ear Fot (Gibber	ot (Festives mo	nillonne)	5
	Gibberolin Ear Rot (Gibber	ollo zolos)		_
	Other (Specify)			

Di India	Data			
PHEWG	Application Variety Data	Page 4	Standard Variety Data	
11. INSECT RE	SISTANCE (Rate from 1 (mo	st susceptible) to 8 (me	et resistant); (leave blank if not leeted);	
Ž	suant paper little (Opcorp- com Wern (Hernder) Com Wern (Hernder) Lud Fadeling Shift Fadeling Shift Fadeling Shift Fadeling Shift Fadeling Shift Fadeling Shift Fadeling Shift Shift Fadeling Shift Sh	isphem maids) sophem maids) so deridebus) site substant site andebus) site of peeding) Land Preeding) Land Record service between service between service between services between s		
12. AGRO	NOMIC TRAITS: Staygreen (at 65 days after	e authoris Chile		
_	on a scale from ?-worst to	9 =encellent)		
- 9.0	% Drapped Euro (pt 65 day % Pro-ordinate Bellin San % Pro-ordinate Root Lodge Post-ordinate Root Lodge Roots Tield of Intend Par 5	s zilar inthesis) iping he:	مم	
6,000.9	Post-orthodo Reci Lobelo Halle Yield of Inbred Per S	jal 65 days wher artis e (at 12-13% grain ma	2467.5	
13. MOLECE	ULAR MARKERS: (O-data un	evollable; 1=data avoil	able but not supplied; 2×data supplied);	_
	1 leozymes	g RPLP's	g RAPO's	-
COMMENTS (eg.	state how heat units were can Mected. Continue in Exhibit C	culated, standard Inbre)):	d seed source, and/or	•
Application Variety	Deta F	lage 4	Standard Variety Data	

CLARIFICATION OF DATA IN EXHIBITS B AND C

200100245

note the data presented in Exhibit C, "Objective Description of Variety," are collected primarily at mon and Ankery, lows. The data is Exhibit B, are from comparisons of inbreds grown in the same tests in designed growing area of PHSWG and in Johnston and Ankery, IA. The data in Tables 1A and 1B are from all comparison t-tests collected in Johnston and Ankery, IA. These traits collectively show distinct treams between the two varieties.

The data collected in exhibit C was collected in 2000 for page 1 and 2. There were 3 different pixeling datas planted for these trials. There are environmental factors that differ from planting data to pixeling date. Environmental temperature and precipitation differences during the vegetative and mind lipseriods can impact plant and grain traits, and are a source of variability. The extraormental conditions described shove could result in larger standard deviations. The variation associated with environment to environment is normally higher than the variation associated within librations.

The information for the standard inbred variety is based on paired comparison information. Therefore, the locations and years included depend on whether both the standard inbred vaniety and the residy to be PVP'd are grown together. For some varieties there are more years or locations of paired that available. This results in some differences between the description of the standard directly arisety between applications.

On Y	B. DEPARTMENT OF AGRICULTURE GROCULTURAL IMPRETING SERVICE	The following statements are made in acc 1974 (5 U. S. C. 552a) and the Paperson	ordance with the Privacy Act of
lan-	EXHIBIT E		
General	OF THE BASIS OF OWNERSHIP	Application is required in order to deter certificate is to be issued (7 U.S.C. 2421), until certificate is teased (7 U.S.C. 2428).	nine if a plant validty protection information is held confidential
NAME OF APPLICA	(T(S)	2. TEMPORARY DESIGNATION	3. VARIETY NAME
PIONEER HI	BRED INTERNATIONAL, INC.	OR EXPERIMENTAL NUMBER	
(T)			PH6WG
ADDRESS (Street and	No., or R.F.D. No., City, State, and ZIP, and Country)	5. TELEPHONE (regards aver code)	B. FAX pincluse area socies
7301 NW 6	2 nd AVENUE	515-270-4051	
2.0 BOX 85		313-270-4051	515-253-2125
COMMSTON,	IA 50131-0085	7. PVPO NUMBER	0245
the amplicant on	m all rights to the variety? Mark an "X" in appropriate b	lock If no, please explain: N YES	DNO
200			
73.80			
away e			
Control (mark)	feal or company) a U.S. national or U.S. based compar	W? TES D NO	
STATE STATE			
Marie Carlo		Notes answer gag of the following:	
	s to variety were owned by individual(s), in(are) the orig	inal owner(s) a U.S. national(s)?	
EL YES	NO If no, give name of sountry		
A Workshall dobe	s to variety were owned by a company(les), is(ese) the	and the second	
THE YES		inginal euner(s) a U.S. based company?	
	□ NO If no, pive name of country		
	on connecting (if recorded, use reverse for eater asses):		
The second by Co.	Ioneer Hi-Bred International, Inc.		
	re-troo international, Inc.		
Beria.			
C) Spring			
	suffered only so owners (ast licensess) who sees one of the	e following erneria:	

the second section to endouse of the U.S. for the auto group and species.

Objectly, or owned by national of a country which effects similar protection as nationals of the U.S. based, owned by nationals of a UPOV member 1 and 1 and

the applicant treet one of the above criteria.

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The Minister is 1981-0645. The time contained in compared the information of presentations to accept the minister part of the control cumber for the the cumber for

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U.S. Department of Agriculture, Washington, D.C. 20220, or can 1-600-016-0340 (roles) or (202) 739-127 (TDD) USEA 4 on aquel compleyment

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